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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,359	12/28/2001	Kohshi Yoshimura	000803A	4346

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EXAMINER

MUTSCHLER, BRIAN L

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/028,359

Applicant(s)

YOSHIMURA ET AL.

Examiner

Brian L. Mutschler

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date See 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: IDS: 20011228; 20030616; and 20040128.

## **DETAILED ACTION**

### ***Comments***

1. It is noted that claims 7-9 and 11-13 include several limitations that are not positive process limitations. For example, claim 11 recites the phrases "an electroplating device comprising an anode which is inserted through and disposed in a hole," "a member for rotating said work," and "a member for supplying a plating current to said work." Each of these phrases is directed towards the electroplating device that is used, but the phrases do not limit the actual process. The only process step recited in claim 11 is the step of using an electroplating device. There are no further limitations on how the electroplated device is actually used. Positive process limitations could include --inserting an anode through a hole--, --rotating the work--, and --supplying a plating current--.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

Claim 11 recites "A process for electroplating a work" comprising the single step of "using an electroplating device" (see lines 1-2). This claim is indefinite because a positive step of electroplating is not recited. The step of "using an electroplating device"

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does not sufficiently support an electroplating step. At a minimum, electroplating requires an electric potential and a source of the material to be electroplated. The same applies to dependent claims 12 and 13.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7, 8, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Held (U.S. Pat. No. 1,076,424).

Regarding claims 7 and 11, Held discloses a method of electroplating a workpiece using an electroplating device having an anode **e** inserted though and disposed in a hole in the workpiece **a**, means for rotating the workpiece (rollers **c**) about its center axis, and supplying a plating current to the workpiece (fig. 2; page 1, lines 84-100; page 2, lines 48-60).

Regarding claims 8 and 12, the workpiece **a** is a ring-shaped workpiece (fig. 2).

Since Held teaches all of the limitations recited in the instant claims, the reference is deemed to be anticipatory.

6. Claims 7, 8, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 9-41190 A, herein referred to as JP '190.

Regarding claims 7 and 11, JP '190 discloses a method for electroplating a workpiece comprising the steps of using an electroplating device having an anode 3 inserted and disposed in a hole of the workpiece 7, means for rotating the workpiece about its center axis, and supplying a plating electric current to the workpiece 7 (see English abstract; figs. 1 and 2).

Regarding claims 8 and 12, the workpiece 7 is a ring-shaped workpiece (figs. 1 and 2).

Since JP '190 teaches all of the limitations recited in the instant claims, the reference is deemed to be anticipatory.

7. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by WO99/23675, herein referred to as WO '675. (EP 1 028 437 A1 ("EP '437" is an English language equivalent of WO '675, and citations will be made to both references.)

WO '675 discloses a ring-shaped bonded magnet having a plated film on the entire surface thereof (WO '675 page 19 = EP '437 paragraphs [0085] to [0088]). The film thickness on the inner diameter side of the magnet is 22  $\mu\text{m}$  and the film thickness on the outer diameter side of the magnet is 23  $\mu\text{m}$ , a variation in thickness of less than 5% (WO '675 page 19 and Table 6 = EP '437 paragraph [0087] and Table 6).

Since WO '675 teaches all of the limitations recited in the instant claims, the reference is deemed to be anticipatory.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Held (U.S. Pat. No. 1,076,424) in view of JP 10-294209, herein referred to as JP '209.

Held discloses a method of electroplating a workpiece having the limitations recited in claims 7, 8, 11, and 12 of the instant invention, as explained above in section 5.

The method of Held differs from the instant invention because Held does not disclose that the workpiece is a bonded magnet.

JP '209 discloses a method of electroplating a workpiece by inserting an anode **1** inside a hole of a workpiece **3**, wherein the workpiece is a bonded magnet (see English abstract; fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the workpiece electroplated in the method of Held to use a bonded magnet workpiece as taught by JP '209 because JP '209 teaches that bonded magnets can be similarly electroplated to have high corrosion resistance and high tensile strength.

10. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-41190 A, as applied above to claims 7, 8, 11, and 12, and further in view of JP 10-294209.

JP '190 discloses a method for electroplating a workpiece having the limitations recited in claims 7, 8, 11, and 12 of the instant invention, as explained above in section 6.

The method of JP '190 differs from the instant invention because JP '190 does not disclose that the workpiece is a bonded magnet.

JP '209 discloses a method of electroplating a workpiece by inserting an anode **1** inside a hole of a workpiece **3**, wherein the workpiece is a bonded magnet (see English abstract; fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the workpiece electroplated in the method of JP '190 to use a bonded magnet workpiece as taught by JP '209 because JP '209 teaches that bonded magnets can be similarly electroplated to have high corrosion resistance and high tensile strength.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references additionally teach methods of plating workpieces and ring-shaped bonded magnets.

US 5,302,464      Nomura et al.




JP 2-97697 A

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Mutschler whose telephone number is (571) 272-1341. The examiner can normally be reached on Monday-Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

blm  
May 7, 2004



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